

Practical-5

Prac – 5 (A) (Custom message)

Code:

```
import 'package:flutter/material.dart';

void main() {
  runApp(const CustomMessageApp());
}

class CustomMessageApp extends StatelessWidget {
  const CustomMessageApp({Key? key}) : super(key: key);

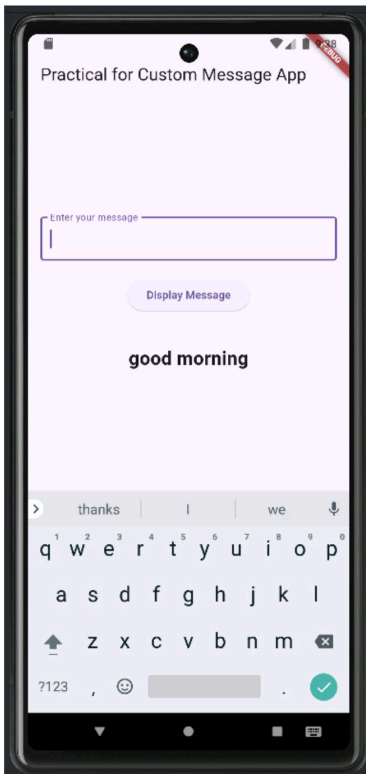
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Practical for Custom Message App',
      theme: ThemeData(
        primarySwatch: Colors.purple,
      ),
      home: const CustomMessageScreen(),
    );
  }
}

class CustomMessageScreen extends StatefulWidget {
  const CustomMessageScreen({Key? key}) : super(key: key);

  @override
  _CustomMessageScreenState createState() => _CustomMessageScreenState();
}
```

```
class _CustomMessageScreenState extends State<CustomMessageScreen> {  
  String _message = 'The message will come here';  
  final TextEditingController _controller = TextEditingController();  
  
  void _updateMessage() {  
    setState(() {  
      _message = _controller.text;  
    });  
    _controller.clear(); // Clear the text field after submitting  
  }  
  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: const Text('Practical for Custom Message App'),  
      ),  
      body: Padding(  
        padding: const EdgeInsets.all(16.0),  
        child: Column(  
          mainAxisAlignment: MainAxisAlignment.center,  
          children: [  
            TextField(  
              controller: _controller,  
              decoration: const InputDecoration(  
                border: OutlineInputBorder(),  
                labelText: 'Enter your message',  
              ),  
            ),  
            const SizedBox(height: 20),  
          ],  
        ),  
      ),  
    );  
  }  
}
```

```
ElevatedButton(  
  onPressed: _updateMessage,  
  child: const Text('Display Message'),  
)  
const SizedBox(height: 40),  
Text(  
  _message,  
  style: const TextStyle(  
    fontSize: 24,  
    fontWeight: FontWeight.bold,  
  ),  
  textAlign: TextAlign.center,  
)  
],  
)  
)  
);  
}
```



Prac – 5 (B) (Simple Calculator)

Code:

```
import 'package:flutter/material.dart';

void main() {
  runApp(const CalculatorApp());
}

class CalculatorApp extends StatelessWidget {
  const CalculatorApp({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Practical for Simple Calculator',
      theme: ThemeData(
```

```

        primarySwatch: Colors.purple,
    ),
    home: const CalculatorScreen(),
);
}
}

```

```

class CalculatorScreen extends StatefulWidget {
  const CalculatorScreen({Key? key}) : super(key: key);

  @override
  _CalculatorScreenState createState() => _CalculatorScreenState();
}

```

```

class _CalculatorScreenState extends State<CalculatorScreen> {
  String _output = '0';
  String _operand = "";
  double _num1 = 0;
  double _num2 = 0;

  void _buttonPressed(String buttonText) {
    setState(() {
      if (buttonText == 'C') {
        _output = '0';
        _num1 = 0;
        _num2 = 0;
        _operand = "";
      } else if (buttonText == '+' || buttonText == '-' || buttonText == '×' || buttonText == '÷') {
        _num1 = double.parse(_output);
        _operand = buttonText;
        _output = '0';
      }
    });
  }
}

```

```

} else if (buttonText == '=') {
  _num2 = double.parse(_output);
  if (_operand == '+') {
    _output = (_num1 + _num2).toString();
  } else if (_operand == '-') {
    _output = (_num1 - _num2).toString();
  } else if (_operand == '×') {
    _output = (_num1 * _num2).toString();
  } else if (_operand == '÷') {
    _output = (_num1 / _num2).toString();
  }
  _num1 = 0;
  _num2 = 0;
  _operand = "";
} else {
  if (_output == '0') {
    _output = buttonText;
  } else {
    _output += buttonText;
  }
}
});
}

```

```

Widget _buildButton(String buttonText) {
  return Expanded(
    child: Padding(
      padding: const EdgeInsets.all(8.0),
      child: ElevatedButton(
        onPressed: () => _buttonPressed(buttonText),
        child: Text(

```

```
        buttonText,  
        style: const TextStyle(  
          fontSize: 24.0,  
          fontWeight: FontWeight.bold,  
        ),  
      ),  
    ),  
  ),  
);  
}
```

@override

```
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(  
      title: const Text('Practical for Simple Calculator'),  
      backgroundColor: Colors.purpleAccent,  
    ),  
    body: Column(  
      children: <Widget>[  
        Expanded(  
          child: Container(  
            padding: const EdgeInsets.all(24.0),  
            alignment: Alignment.centerRight,  
            child: Text(  
              _output,  
              style: const TextStyle(  
                fontSize: 48.0,  
                fontWeight: FontWeight.bold,  
              ),  
            ),  
          ),  
        ],  
      ),  
    ),  
  ),  
);  
}
```

```
    ),
  ),
  Column(
    children: <Widget>[
      Row(
        children: <Widget>[
          _buildButton('7'),
          _buildButton('8'),
          _buildButton('9'),
          _buildButton('÷'),
        ],
      ),
      Row(
        children: <Widget>[
          _buildButton('4'),
          _buildButton('5'),
          _buildButton('6'),
          _buildButton('×'),
        ],
      ),
      Row(
        children: <Widget>[
          _buildButton('1'),
          _buildButton('2'),
          _buildButton('3'),
          _buildButton('-'),
        ],
      ),
      Row(
        children: <Widget>[
          _buildButton('0'),
```



```
        _buildButton('C'),  
        _buildButton('='),  
        _buildButton('+'),  
      ],  
    ),  
  ],  
),  
],  
),  
],  
),  
);  
}  
}
```

